

## HAZER PRODUCES FIRST HYDROGEN AND GRAPHITE FROM THE PRE-PILOT PLANT

- **Significant scale-up milestone achieved with successful production of hydrogen and graphite from the Company's pre-pilot plant**
- **Marks the first time the Hazer Process has produced graphite in a pressurised, scalable fluidised bed reactor system**
- **Further commissioning is ongoing and Hazer expects to be operational and experimentation-ready by end April**

**PERTH, AUSTRALIA; 5<sup>th</sup> APRIL 2017:** Hazer Group Ltd ("Hazer" or "the Company") (ASX:HZR, HZRO) is pleased to announce that the "hot commissioning" of the company's pre-pilot facility (PPP) is now complete and the facility has now successfully produced graphite and hydrogen from natural gas feedstock.

This marks a significant milestone in the Company's ongoing commissioning of the Pre-Pilot Plant, and demonstrates basic reaction functionality for the PPP facility. It also represents the first graphite production under pressurised conditions within a scalable fluidised bed reactor. Initial runs were undertaken with small quantities of catalyst and natural gas flow rates of 0.3 to 0.4 Nm<sup>3</sup>/hr.

Final commissioning of the PPP is ongoing, and the Company anticipates the PPP to be fully commissioned and operational by the end of April. Once fully operational, the PPP will be used to generate validation and optimisation data that will be necessary for the design and construction of larger plants. This milestone also confirms Hazer's successful transition from laboratory-based standard equipment to a custom-designed and constructed plant, and moves the company closer towards commercialisation of the Hazer Process.

On completion of final commissioning, Hazer intends to initially operate the system in semi-continuous mode; whereby graphite is ejected from the system during operation but the catalyst is inserted prior to operation. This initial phase allows the system to be incrementally tested in sequential fashion.

Following the semi-continuous stage, the company will be integrating the system for catalyst injection and full process optimisation. The primary purpose of this latter stage will be to assess the optimum operating conditions across a full range of variables, including temperature, pressure, gas flow, and catalyst type/sizes, as well as demonstrate the continuous operation (catalyst injection and graphite ejection) of the system.

The progressive stages of operation and estimated timelines are below;

- **First Hydrogen and Graphite production** – Complete
- **Start Semi-Continuous Operation** – Mid 2017
- **Start Fully Continuous Operation** – Late 2017

In conjunction with the on-going work related to the progressive stages of operation, Hazer will use the Pre-Pilot Plant as a demonstration facility to showcase the Hazer Process to potential commercial and strategic partners in the hydrogen and graphite sectors.

The graphite produced at the Pre-Pilot Plant will be characterised and used to further complement the ongoing graphite test work currently advancing at Hazer's facilities at the University of Sydney, as well as being potentially used for supply to third parties for commercial assessment across a range of graphite applications.

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### HAZER GROUP'S PRE-PILOT PLANT



Hazer's Pre-Pilot Plant



Top View of The Facility



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## **ABOUT HAZER GROUP LTD**

Hazer Group Limited (“Hazer” or “The Company”) is an ASX-listed technology development company undertaking the commercialisation of the Hazer Process, a low-emission hydrogen and graphite production process. The Hazer Process enables the effective conversion of natural gas and similar feedstocks, into hydrogen and high quality graphite, using iron ore as a process catalyst.

For further information, investor or media enquiries, please contact:

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